Applicant: Katia Georgopoulos et al.

Serial No.: 09/019,348 Filed

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Page

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

For the Examiner's convenience, all the pending claims are reproduced below, whether or not amended. Please amend claims 26 and 27 as follows:

- 1-17. (Canceled).
- (Previously presented) A method of obtaining an antibody, comprising: 18. providing a mammal that (a) has a pro-B cell which is Aiolos (SEQ ID NO:2 or 30) deregulated and (b) is immunized with an antigen recognized by the pro-B cell; and isolating an antibody against the antigen from the mammal or from a B cell derived from the mammal, to thereby obtain an antibody.
 - (Original) The method of claim 18, wherein the mammal is a mouse. 19.
- (Original) The method of claim 18, wherein the mammal is an Aiolos transgenic 20. mouse.
- (Previously presented) The method of claim 18, wherein the antigen is an 21. autoantigen.
- (Previously presented) The method of claim 18, wherein the mammal is 22. immunized with an alloantigen or xenoantigen.
- (Original) The method of claim 22, wherein the antigen is poorly antigenic in wild 23. type animals.

Applicant: Katia Georgopoulos et al.

Serial No.: 09/019,348 Filed: February 5, 1998

Page: 3

24. (Previously presented) The method of claim 22, wherein the antigen has at least 90% homology between the first and second species as determined using the ALIGN program with a PAM120 weight residue table, a gap length penalty of 12, and a gap penalty of 4 or using XBLAST with default parameters, wherein the first species is the animal which provides the antibody and the second species is the species which provides the antigen.

- 25. (Original) The method of claim 18, wherein the antibody is an IgG antibody.
- 26. (Currently amended) The method of claim 18, wherein the mammal carries homozygous null mutations at the Aiolos gene.
- 27. (Currently amended) The method of claim 18, the method further comprises comprising isolating one or more B cells from the mammal and isolating the antibody therefrom from the isolated B-cells.
- 28. (Previously presented) The method of claim 18, wherein the B cell from the animal is fused with a second cell to provide a hybridoma and the antibody is isolated from the hybridoma.
- 29. (Previously presented) A method of obtaining an antibody comprising: providing a mouse that (a) has a pro-B cell which is homozygous for null or underexpressing mutations at the Aiolos (SEQ ID NO:2) locus and (b) is immunized with an antigen recognized by the pro-B cell; and

isolating an antibody against the antigen from the mouse, to thereby obtain an antibody.

- 30. (Original) The method of claim 29, wherein the mouse is an Aiolos transgenic mouse.
- 31. (Previously presented) The method of claim 29, wherein the antigen is an autoantigen.

Applicant: Katia Georgopoulos et al.

Serial No.: 09/019,348 Filed: February 5, 1998

Page: 4

32. (Previously presented) The method of claim 29, wherein the mouse is immunized with an alloantigen or xenoantigen.

- 33. (Original) The method of claim 32, wherein the antigen is poorly antigenic in wild type animals.
- 34. (Previously presented) The method of claim 32, wherein the antigen has at least 90% homology between the first and second species as determined using the ALIGN program with a PAM120 weight residue table, a gap length penalty of 12, and a gap penalty of 4 or using XBLAST with default parameters, wherein the first species is the animal which provides the antibody and the second species is the species which provides the antigen.
- 35. (Previously presented) A method of obtaining a monoclonal antibody, comprising:

providing a mouse that (a) has a pro-B cell which is homozygous for null or underexpressing mutations at the Aiolos (SEQ ID NO:2) locus and (b) is immunized with an antigen recognized by the pro-B cell;

isolating a B cell from the mouse; and

isolating an antibody against the antigen from the B cell or a derivative of the cell, to thereby obtain an antibody.

- 37. (Canceled)
- 36. (Original) The method of claim 35, wherein the derivative is a hybridoma.
- 38. (Original) The method of claim 35, wherein the mouse is an Aiolos transgenic mouse.
- 39. (Previously presented) The method of claim 35, wherein the antigen is an autoantigen.

Applicant: Katia Georgopoulos et al.

Serial No.: 09/019,348 Filed: February 5, 1998

Page : 5

40. (Previously presented) The method of claim 35, wherein the mouse is immunized with an alloantigen or xenoantigen.

- 41. (Original) The method of claim 35, wherein the antigen is poorly antigenic in wild type animals.
- 42. (Previously presented) The method of claim 18, wherein the mammal is homozygous for a deletion of exon 7 of the Aiolos gene or a portion thereof.
- 43. (Previously presented) The method of claim 29, wherein the mouse is homozygous for a deletion of exon 7 of the Aiolos gene or a portion thereof.
- 44. (Previously presented) The method of claim 35, wherein the mouse is homozygous for a deletion of exon 7 of the Aiolos gene or a portion thereof.